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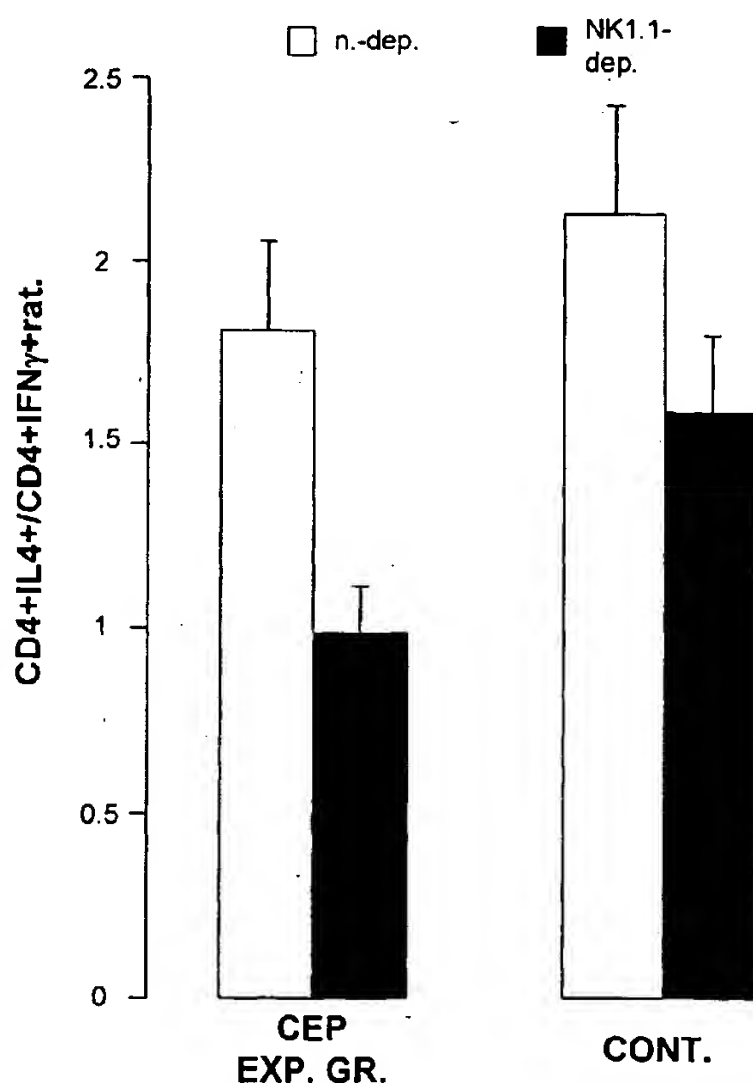
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140537 25 December 2000 (25.12.2000) **IL**
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[Continued on next page]

(54) Title: **EDUCATED NK T CELLS AND THEIR USES IN THE TREATMENT OF IMMUNE-RELATED DISORDERS**



(57) Abstract: The present invention relates to a method for the treatment of immune-related disorders in a mammalian subject in need of such treatment. This method comprises the step of manipulating the NK T cell population in said subject by suitable means, said manipulation of the NK T cell population resulting in modulation of the Th1/Th2 balance toward anti-inflammatory cytokine producing cells. Manipulation of the NK T cell population may be performed either by depletion of said cells by a suitable means or alternatively by *ex vivo* education of the NK T cells, such that the educated NK T cells have the capability to modulate the Th1/Th2 balance toward anti-inflammatory cytokine producing cells. The invention further relates to pharmaceutical compositions for the treatment of immune-related disorders in a mammalian subject. These compositions comprising as an effective ingredient an *ex vivo* educated NK T cell. The invention further provides for an *ex vivo* educated NK T cell and uses thereof in the treatment of immune-related disorders.

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European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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INTERNATIONAL SEARCH REPORT

International Application No

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A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 A61K38/19

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, WPI Data, PAJ, MEDLINE, CHEM ABS Data, SCISEARCH

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>TROP S ET AL: "LIVER-ASSOCIATED LYMPHOCYTES EXPRESSING NK1.1 ARE ESSENTIAL FOR ORAL IMMUNE TOLERANCE INDUCTION IN A MURINE MODEL"</p> <p>HEPATOLOGY, WILLIAMS AND WILKINS, BALTIMORE, MD, US, vol. 29, no. 3, March 1999 (1999-03), pages 746-755, XP000990485</p> <p>ISSN: 0270-9139</p> <p>abstract; figures 2,5; table 1</p> <p style="text-align: center;">--- -/--</p>	1-55

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

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- *&* document member of the same patent family

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International Application No

PCT/IL 01/01197

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ILAN YARON ET AL: "Treatment of experimental colitis by oral tolerance induction: A central role for suppressor lymphocytes." AMERICAN JOURNAL OF GASTROENTEROLOGY, vol. 95, no. 4, April 2000 (2000-04), pages 966-973, XP002199588 ISSN: 0002-9270 abstract; figures 1,2,4,7	1-55
X	BURDIN N ET AL: "IMMUNOZATION WITH ALPHA-GALACTOSYLCERAMIDE POLARIZES CD1-REACTIVE NK T CELLS TOWARDS TH2 CYTOKINE SYNTHESIS" EUROPEAN JOURNAL OF IMMUNOLOGY, WEINHEIM, DE, vol. 29, 1999, pages 2014-2025, XP002938932 ISSN: 0014-2980 abstract; figures 1-3,5,6	1-55
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Y	US 5 721 351 A (LEVINSON DOUGLAS ADAM) 24 February 1998 (1998-02-24) the whole document	1-55
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International Application No
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
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T	<p>SHLOMAI AMIR ET AL: "Immunomodulation of experimental colitis: The role of NK1. I liver lymphocytes and surrogate antigens: Bystander effect."</p> <p>JOURNAL OF PATHOLOGY, vol. 195, no. 4, November 2001 (2001-11), pages 498-507, XP002196803 ISSN: 0022-3417</p> <p>-----</p>	

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